

CLAIMS

What is claimed is:

1. An apparatus comprising:
a substrate having a plurality of through holes; and
a plurality of cables each comprising a conductor, each cable extending through respective ones of the plurality of through holes of the substrate and terminating about a surface of the substrate such that the conductors of respective ones of the plurality of cables are planarly aligned and available for electrical contact.
2. The apparatus of claim 1, wherein at least one of the plurality of cables comprise coaxial cables including a central conductor and a shield, and the shield of the at least one of the plurality of cables is planarly aligned with the central conductor.
3. The apparatus of claim 1, wherein the plurality of through holes of the substrate are configured such that conductors are aligned with respective contact points of an electronic component.
4. The apparatus of claim 3, wherein the electronic component is a circuit test component.
5. The apparatus of claim 4, wherein the electronic component is one of an interposer and a space transformer.
6. The apparatus of claim 1, wherein the surface of the substrate comprises a dielectric material.
7. The apparatus of claim 1, wherein contact pads are coupled to respective conductors at the surface of the substrate.
8. The apparatus of claim 1, wherein ends of the conductors of respective ones of the plurality of cables about the surface of the substrate are coated with a material that resists oxidation.
9. The apparatus of claim 8, wherein the material is selected from one of gold, platinum, palladium, or other metallic conductor.

10. The apparatus of claim 1, wherein the conductors of the plurality of cables comprise first conductors designated as data signal lines between a first electronic component and a second electronic component.

11. The apparatus of claim 10, wherein the apparatus further comprises a plurality of second conductors terminating about the surface of the substrate and available for electrical contact and the second conductors are designated as supply and return lines.

12. The apparatus of claim 11, wherein the second conductors each comprise a portion of a respective cable.

13. The apparatus of claim 10, wherein the first conductors are disposed in a first area of the substrate and the second conductors are disposed in a different second area.

14. The apparatus of claim 1, wherein the substrate is a first substrate and the conductors of the plurality of cables comprise first conductors designated as data signal lines between a first electronic component and a second electronic component, the apparatus further comprising a second substrate disposed about the first substrate and comprising supply and return lines adapted to be coupled to corresponding supply and return lines of one of the first electronic component and the second electronic component.

15. The apparatus of claim 1, wherein the substrate is a first substrate and the plurality of cables are a first plurality of cables, and the apparatus further comprises:

a second substrate coupled to the first substrate, the second substrate comprising a plurality of cables, each comprising a conductor and each extending through respective through holes of the second substrate and terminating about a surface of the second substrate.

16. The apparatus of claim 15, wherein the conductor of the first plurality of cables comprise data signal lines and the second plurality of cables comprises supply and return lines.

17. An apparatus comprising:

a cable interface comprising a plurality of cables each comprising a conductor, each cable extending through respective ones of the plurality of through holes of a body of the cable interface and having a first end terminating about a surface of the

cable interface such that the conductors of respective ones of the plurality of cables are planarly aligned;

an interconnection component comprising a first plurality of contact points aligned with respective ones of the conductors of the plurality of cables and a second plurality of contact points aligned to corresponding contact points of a device to be tested; and

a testing component coupled to a second end of respective ones of the plurality of cables, the testing component comprising circuitry to test a device.

18. The apparatus of claim 17, wherein the interconnection component comprises a space transformer and the first plurality of contact points are at a first pitch and the second plurality of contact points are at a different second pitch.

19. The apparatus of claim 18, wherein the space transformer comprises a first interconnection component, the system further comprising a second interconnection component comprising a first plurality of interconnection elements having contact points aligned with respective ones of the conductors of the plurality of cables and a second plurality of interconnection elements having contact points aligned to corresponding contacts points of the space transformer.

20. The apparatus of claim 17, wherein the conductors of the plurality of cables comprise first conductors designated as data signal lines between a device to be tested and the testing component and the interconnection component comprises a first interconnection component, the apparatus further comprising:

a second interconnection component disposed about the cable interface and comprising second conductors designated as reference signal lines coupled to corresponding reference signal lines of the testing component.

21. The apparatus of claim 17, wherein the first interconnection component comprises a side edge with contact points disposed on a surface of the first component along the side edge coupled to respective second conductors of the second interconnection component.

22. The apparatus of claim 21, wherein the surface of the first component is a first surface, the first component further comprising a second surface opposite the first surface, wherein the first plurality of contact points are disposed on the first surface and the second plurality of contact points are disposed on the second surface.

23. A method comprising:
providing a plurality of cables in an array, the plurality of cables comprising respective conductors having ends disposed in a plane of a body of the array, the ends disposed at a pitch suitable for interfacing with one or more chip-scale components; and
routing signals through the conductors of the plurality of cables between a first electronic component and a second electronic component.

24. The method of claim 23, wherein the first electronic component is a testing component, the method further comprising:
coupling the conductors of the plurality of cables to an interconnection component comprising a plurality of contact points corresponding to contact points of the second electronic component.

25. The method of claim 24, wherein coupling the conductors to an interconnection component further comprises modifying a contact pitch of the conductors to a contact pitch of the second electronic component.

26. The method of claim 23, further comprising:
introducing contact pads over the respective conductors of the plurality of cables.

27. The method of claim 23, wherein the conductors of the plurality of cables comprise first conductors and routing signals comprises routing data signals, the method further comprising:
assembling second conductors designated as supply and return lines in a second different array; and
routing supply and return through the second conductors between the electronic component and the testing component.